Listing of Claims.

Please amend the claims as shown below by deleting the material indicated by strike-through and adding the underlined material. This listing of claims will replace all prior versions and listings of the claims in this application.

1. (Original) A method of identifying an inhibitor of retrovirus protease activity, comprising:

(a) providing a nucleic acid that encodes a retrovirus GagPol or a fragment thereof comprising a protease, a protease cleavage site, a tether and a detectable moiety, wherein either the tether or the detectable moiety is located N-terminal to the cleavage site and the other is located C-terminal to the protease cleavage site;

(b) expressing the nucleic acid to produce the retrovirus GagPol or fragment thereof;

(c) binding the retrovirus GagPol or fragment thereof to a substrate comprising a binding partner for the tether such that the retrovirus GagPol or fragment thereof is bound via the tether to the substrate;

(d) contacting the retrovirus GagPol or fragment thereof with a candidate compound;

(e) removing released proteolytic products comprising the detectable moiety; and

(f) detecting the level of the detectable moiety bound to the substrate wherein persistence of the detectable moiety is indicative of an inhibitor of retrovirus protease activity.

2. (Original) The method according to Claim 1, wherein the retrovirus is a Human Immunodeficiency Virus (HIV).

3. (Currently amended) The method according to Claim 1 ~~any one of Claims 1 to 2~~, wherein the retrovirus is a resistant retrovirus strain.

4. (Currently amended) The method according to Claim 1 ~~any of Claims 1 to 3~~, wherein the nucleic acid encodes a retrovirus GagPol fragment comprising the retrovirus protease and transframe protein.

5. (Original) The method according to Claim 4, wherein the fragment further comprises the retrovirus nucleocapsid protein.

6. (Original) The method according to Claim 5, wherein the fragment further comprises the retrovirus p2 protein.

7. (Original) The method according to Claim 6, wherein the fragment further comprises the retrovirus capsid protein.

8. (Original) The method according to Claim 7, wherein the fragment further comprises the retrovirus matrix protein.

9. (Currently amended) The method according to Claim 1 ~~any one of Claims 1 to 8~~, wherein the nucleic acid encodes a retrovirus GagPol fragment comprising the retrovirus protease and the retrovirus reverse transcriptase.

10. (Original) The method according to Claim 9, wherein the fragment further comprises the retrovirus integrase.

11. (Original) The method according to Claim 1, wherein the nucleic acid encodes the retrovirus GagPol.

12. (Currently amended) The method according to Claim 1 ~~any one of Claims 1 to 11~~, wherein the tether is an epitope within the retrovirus GagPol or fragment thereof.

13. (Currently amended) The method according to Claim 7 ~~Claims 7 or 12~~, wherein the tether is an epitope within the retrovirus capsid protein.

14. (Currently amended) The method according to Claim 1 ~~any one of Claims 1 to 13~~, wherein the binding partner for the tether is an antibody.

15. (Currently amended) The method according to Claim 1 ~~any one of Claims 1 to 14~~, wherein the detectable moiety is selected from the group consisting of luciferase, hemagglutinin antigen, maltose binding protein, c-myc, FLAG epitope, glutathione-S-transferase, fluorescent moiety, β-glucuronidase, alkaline phosphatase and β-galactosidase.

16. (Currently amended) The method according to Claim 1 ~~any one of Claims 1 to 14~~, wherein the detectable moiety is an epitope within the retrovirus GagPol or fragment thereof.

17. (Currently amended) The method according to Claim 1 ~~any one of Claims 1 to 16~~, wherein the method comprises an ELISA-based assay.

18-19. (Canceled).

20. (Original) A kit for identifying inhibitors of retrovirus protease activity, comprising:

(a) a nucleic acid that encodes a retrovirus GagPol or a fragment thereof comprising a protease, a protease cleavage site, a tether and a detectable moiety, wherein either the tether or the detectable moiety is located N-terminal to the cleavage site and the other is located C-terminal to the protease cleavage site, such that cleavage at the protease cleavage site results in release of a proteolytic product comprising the detectable moiety; and

(b) a substrate comprising a binding partner for the tether.

21-35. (Canceled).

36. (Original) A nucleic acid that encodes a retrovirus GagPol or a fragment thereof comprising a protease, a protease cleavage site, an exogenous tether and an exogenous detectable moiety, wherein either the tether or the detectable moiety is located N-terminal to the protease cleavage site and the other is located C-terminal to the protease cleavage site.

37. (Original) A vector comprising the nucleic acid of claim 36.